

## Section 1. Registration Information

### Source Identification

---

|                         |  |
|-------------------------|--|
| Facility Name:          | City of Peoria, Greenway Water Treatment Plant |
| Parent Company #1 Name: | None   |
| Parent Company #2 Name: | None   |

### Submission and Acceptance

---

|   |                                     |
|---|-------------------------------------|
| Submission Type:                            | Re-submission                       |
| Subsequent RMP Submission Reason:           | 5-year update (40 CFR 68.190(b)(1)) |
| Description:                                |                                     |
| Receipt Date:                               | 27-Aug-2010                         |
| Postmark Date:                              | 27-Aug-2010                         |
| Next Due Date:                              | 27-Aug-2015                         |
| Completeness Check Date:                    | 09-Jan-2014                         |
| Complete RMP:                               | Yes                                 |
| De-Registration / Closed Reason:            |                                     |
| De-Registration / Closed Reason Other Text: |                                     |
| De-Registered / Closed Date:                |                                     |
| De-Registered / Closed Effective Date:      |                                     |
| Certification Received:                     | Yes                                 |

### Facility Identification

---

|                                |                |
|--------------------------------|----------------|
| EPA Facility Identifier:       | 1000 0017 8103 |
| Other EPA Systems Facility ID: | None           |

### Dun and Bradstreet Numbers (DUNS)

---

|                         |         |
|-------------------------|---------|
| Facility DUNS:          | 2494128 |
| Parent Company #1 DUNS: |         |
| Parent Company #2 DUNS: |         |

### Facility Location Address

---

|           |                      |
|-----------|----------------------|
| Street 1: | 7300 W Greenway Road |
| Street 2: |                      |
| City:     | Peoria               |
| State:    | ARIZONA              |
| ZIP:      | 85831                |
| ZIP4:     | 4486                 |
| County:   | MARICOPA             |

### Facility Latitude and Longitude

---

|                                  |   |
|----------------------------------|---|
| Latitude (decimal):              | 33.626389   |
| Longitude (decimal):             | -112.215556   |
| Lat/Long Method:                 | GPS Code Measurements (Psuedo Range)<br>Standard Positioning Service SA OFF |
| Lat/Long Description:            | Process Unit  |
| Horizontal Accuracy Measure:     | 2   |
| Horizontal Reference Datum Name: | North American Datum of 1983  |
| Source Map Scale Number:         |   |

## Owner or Operator

---

|                 |                |
|-----------------|----------------|
| Operator Name:  | City of Peoria |
| Operator Phone: | (623) 773-7181 |

## Mailing Address

---

|                                     |                    |
|-------------------------------------|--------------------|
| Operator Street 1:                  | 8401 W. Monroe St. |
| Operator Street 2:                  |                    |
| Operator City:                      | Peoria             |
| Operator State:                     | ARIZONA            |
| Operator ZIP:                       | 85345              |
| Operator ZIP4:                      |                    |
| Operator Foreign State or Province: |                    |
| Operator Foreign ZIP:               |                    |
| Operator Foreign Country:           |                    |

## Name and title of person or position responsible for Part 68 (RMP) Implementation

---

|                                  |                           |
|----------------------------------|---------------------------|
| RMP Name of Person:              | Michael D. Weber          |
| RMP Title of Person or Position: | Deputy Utilities Director |
| RMP E-mail Address:              | mike.weber@peoriaaz.gov   |

## Emergency Contact

---

|                                   |                              |
|-----------------------------------|------------------------------|
| Emergency Contact Name:           | Ray Schultz                  |
| Emergency Contact Title:          | Greenway WTP Supervisor      |
| Emergency Contact Phone:          | (623) 773-8355               |
| Emergency Contact 24-Hour Phone:  | (602) 402-4435               |
| Emergency Contact Ext. or PIN:    |                              |
| Emergency Contact E-mail Address: | raymond.schultz@peoriaaz.gov |

## Other Points of Contact

---

|  |                  |
|--|------------------|
| Facility or Parent Company E-mail Address:       |                  |
| Facility Public Contact Phone:                   |                  |
| Facility or Parent Company WWW Homepage Address: | www.peoriaaz.com |

## Local Emergency Planning Committee

---

|       |                      |
|-------|----------------------|
| LEPC: | Maricopa County LEPC |
|-------|----------------------|

## Full Time Equivalent Employees

---

|  |    |
|--|----|
| Number of Full Time Employees (FTE) on Site: | 13 |
| FTE Claimed as CBI:                          |    |

## Covered By

---

|              |     |
|--------------|-----|
| OSHA PSM :   | Yes |
| EPCRA 302 :  | Yes |
| CAA Title V: |     |

Air Operating Permit ID:

## OSHA Ranking

---

OSHA Star or Merit Ranking:

## Last Safety Inspection

---

Last Safety Inspection (By an External Agency)

Date:

Last Safety Inspection Performed By an External Agency:

Never had one

## Predictive Filing

---

Did this RMP involve predictive filing?:

## Preparer Information

---

Preparer Name:

Workplace Safety Specialists

Preparer Phone:

(480) 649-2851

Preparer Street 1:

1122 S. Greenfield Rd. Suite 104

Preparer Street 2:

Preparer City:

Mesa

Preparer State:

ARIZONA

Preparer ZIP:

85206

Preparer ZIP4:

Preparer Foreign State:

Preparer Foreign Country:

Preparer Foreign ZIP:

## Confidential Business Information (CBI)

---

CBI Claimed:

Substantiation Provided:

Unsanitized RMP Provided:

## Reportable Accidents

---

Reportable Accidents:

See Section 6. Accident History below to determine if there were any accidents reported for this RMP.

## Process Chemicals

---

Process ID:

1000019453

Description:

Water disinfection

Process Chemical ID:

1000023125

Program Level:

Program Level 3 process

Chemical Name:

Chlorine

CAS Number:

7782-50-5

Quantity (lbs):

16000

CBI Claimed:

Flammable/Toxic:

Toxic

## Process NAICS

---

|                    |                                     |
|--------------------|-------------------------------------|
| Process ID:        | 1000019453                          |
| Process NAICS ID:  | 1000019838                          |
| Program Level:     | Program Level 3 process             |
| NAICS Code:        | 22131                               |
| NAICS Description: | Water Supply and Irrigation Systems |

## Section 2. Toxics: Worst Case

Toxic Worst ID: 1000015540

---

|                              |                           |
|------------------------------|---------------------------|
| Percent Weight:              |                           |
| Physical State:              | Gas liquified by pressure |
| Model Used:                  | EPA's RMP*Comp(TM)        |
| Release Duration (mins):     | 10                        |
| Wind Speed (m/sec):          | 1.5                       |
| Atmospheric Stability Class: | F                         |
| Topography:                  | Urban                     |

### Passive Mitigation Considered

|             |     |
|-------------|-----|
| Dikes:      |     |
| Enclosures: | Yes |
| Berms:      |     |
| Drains:     |     |
| Sumps:      |     |
| Other Type: |     |

## Section 3. Toxics: Alternative Release

Toxic Alter ID: 1000017076

---

|                              |                           |
|------------------------------|---------------------------|
| Percent Weight:              |                           |
| Physical State:              | Gas liquified by pressure |
| Model Used:                  | EPA's RMP*Comp(TM)        |
| Wind Speed (m/sec):          | 3.0                       |
| Atmospheric Stability Class: | F                         |
| Topography:                  | Urban                     |

### Passive Mitigation Considered

|             |     |
|-------------|-----|
| Dikes:      |     |
| Enclosures: | Yes |
| Berms:      |     |
| Drains:     |     |
| Sumps:      |     |
| Other Type: |     |

### Active Mitigation Considered

|                     |  |
|---------------------|--|
| Sprinkler System:   |  |
| Deluge System:      |  |
| Water Curtain:      |  |
| Neutralization:     |  |
| Excess Flow Valve:  |  |
| Flares:             |  |
| Scrubbers:          | Yes  |
| Emergency Shutdown: | Yes  |
| Other Type:         | Chlorine piping from manifold to ejectors is under vacuum. |

## **Section 4. Flammables: Worst Case**

No records found.

## **Section 5. Flammables: Alternative Release**

No records found.



## Section 6. Accident History

No records found.

## Section 7. Program Level 3

### Description

The process is visually observable from several central points by closed circuit television cameras. Observation windows are also in place in the disinfection building to allow visual inspection from outside the building.

In the event of a chlorine leak in the disinfection building, monitoring equipment interlocks will activate the following when the alarm set point is exceeded: audible and visual alarms on, scale room emergency ventilation and scrubber on; building general ventilation and HVAC off; automatic valve operators shut on the Ton Containers. Emergency "panic buttons" can also manually activate the same actions.

The scrubber is rated at 3,150 acfm and its caustic soda packed bed capacity is 2,300 lbs of chlorine at 170 lbs/min. The manufacturer guarantees <5 ppm chlorine in the exhaust stack within these ratings. If 5 ppm is exceeded, the scrubber will shut down.

There is a ball check and diaphragm check valve in each venturi ejector to prevent backflow to the chlorinator feed line if ejector water supply fails with pressure or restriction on the ejector discharge side.

A regulator at the chlorine manifold reduces the Ton container pressure to below atmospheric and the piping from there to the ejectors is under vacuum. Flow is maintained by the ejector pressure differential.

### Program Level 3 Prevention Program Chemicals

|                                 |            |
|---------------------------------|------------|
| Prevention Program Chemical ID: | 1000019298 |
| Chemical Name:                  | Chlorine   |
| Flammable/Toxic:                | Toxic      |
| CAS Number:                     | 7782-50-5  |

|                                |            |
|--------------------------------|------------|
| Prevention Program Level 3 ID: | 1000016209 |
| NAICS Code:                    | 22131      |

### Safety Information

|   |             |
|---|-------------|
| Safety Review Date (The date on which the safety information was last reviewed or revised): | 03-Jun-2010 |
|---|-------------|

### Process Hazard Analysis (PHA)

|   |             |
|---|-------------|
| PHA Completion Date (Date of last PHA or PHA update): | 03-Jun-2010 |
|---|-------------|

### The Technique Used

|                                    |     |
|------------------------------------|-----|
| What If:                           |     |
| Checklist:                         |     |
| What If/Checklist:                 | Yes |
| HAZOP:                             |     |
| Failure Mode and Effects Analysis: |     |
| Fault Tree Analysis:               |     |
| Other Technique Used:              |     |

PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):

15-Jul-2010

## Major Hazards Identified

---

|  |     |
|--|-----|
| Toxic Release:   | Yes |
| Fire:  |     |
| Explosion:   |     |
| Runaway Reaction:                                      |     |
| Polymerization:  |     |
| Overpressurization:                                    |     |
| Corrosion:   |     |
| Overfilling:   |     |
| Contamination:   |     |
| Equipment Failure:                                     |     |
| Loss of Cooling, Heating, Electricity, Instrument Air: |     |
| Earthquake:  |     |
| Floods (Flood Plain):                                  |     |
| Tornado:   |     |
| Hurricanes:  |     |
| Other Major Hazard Identified:                         |     |

## Process Controls in Use

---

|                               |                                  |
|-------------------------------|----------------------------------|
| Vents:                        | Yes                              |
| Relief Valves:                | Yes                              |
| Check Valves:                 | Yes                              |
| Scrubbers:                    | Yes                              |
| Flares:                       |                                  |
| Manual Shutoffs:              | Yes                              |
| Automatic Shutoffs:           | Yes                              |
| Interlocks:                   | Yes                              |
| Alarms and Procedures:        | Yes                              |
| Keyed Bypass:                 |                                  |
| Emergency Air Supply:         |                                  |
| Emergency Power:              | Yes                              |
| Backup Pump:                  |                                  |
| Grounding Equipment:          |                                  |
| Inhibitor Addition:           |                                  |
| Rupture Disks:                |                                  |
| Excess Flow Device:           |                                  |
| Quench System:                |                                  |
| Purge System:                 |                                  |
| None:                         |                                  |
| Other Process Control in Use: | Chlorine piping is under vacuum. |

## Mitigation Systems in Use

---

|                   |     |
|-------------------|-----|
| Sprinkler System: | Yes |
| Dikes:            |     |
| Fire Walls:       | Yes |
| Blast Walls:      |     |
| Deluge System:    |     |
| Water Curtain:    |     |
| Enclosure:        | Yes |

Neutralization: Yes  
None:  
Other Mitigation System in Use:

### Monitoring/Detection Systems in Use

---

Process Area Detectors: Yes  
Perimeter Monitors:  
None:  
Other Monitoring/Detection System in Use: CCTV surveillance

### Changes Since Last PHA Update

---

Reduction in Chemical Inventory:  
Increase in Chemical Inventory: Yes  
Change Process Parameters:  
Installation of Process Controls:  
Installation of Process Detection Systems:  
Installation of Perimeter Monitoring Systems:  
Installation of Mitigation Systems:  
None Recommended:  
None:  
Other Changes Since Last PHA or PHA Update:

### Review of Operating Procedures

---

Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures): 03-Jun-2010

### Training

---

Training Revision Date (The date of the most recent review or revision of training programs): 03-Jun-2010

### The Type of Training Provided

---

Classroom: Yes  
On the Job: Yes  
Other Training:

### The Type of Competency Testing Used

---

Written Tests: Yes  
Oral Tests: Yes  
Demonstration: Yes  
Observation: Yes  
Other Type of Competency Testing Used:

### Maintenance

---

Maintenance Procedures Revision Date (The date of the most recent review or revision of maintenance procedures): 15-Jul-2010

Equipment Inspection Date (The date of the most recent equipment inspection or test): 03-Jun-2010

Equipment Tested (Equipment most recently inspected or tested): chlorine manifold automatic shutoff valves

## Management of Change

---

Change Management Date (The date of the most recent change that triggered management of change procedures):

Change Management Revision Date (The date of the most recent review or revision of management of change procedures): 03-Jun-2010

## Pre-Startup Review

---

Pre-Startup Review Date (The date of the most recent pre-startup review): 29-Apr-2002

## Compliance Audits

---

Compliance Audit Date (The date of the most recent compliance audit): 01-Jul-2013

Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit): 01-Jul-2013

## Incident Investigation

---

Incident Investigation Date (The date of the most recent incident investigation (if any)):

Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):

## Employee Participation Plans

---

Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans): 03-Jun-2010

## Hot Work Permit Procedures

---

Hot Work permit Review Date (The date of the most recent review or revision of hot work permit procedures): 03-Jun-2010

## Contractor Safety Procedures

---

Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures): 03-Jun-2010

Contractor Safety Performance Evaluation Date  
(The date of the most recent review or revision of  
contractor safety performance):

### Confidential Business Information

---

CBI Claimed:

## **Section 8. Program Level 2**

## Section 9. Emergency Response

### Written Emergency Response (ER) Plan

Community Plan (Is facility included in written community emergency response plan?): Yes

Facility Plan (Does facility have its own written emergency response plan?): Yes

Response Actions (Does ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)?): Yes

Public Information (Does ER plan include procedures for informing the public and local agencies responding to accidental release?): Yes

Healthcare (Does facility's ER plan include information on emergency health care?): Yes

### Emergency Response Review

Review Date (Date of most recent review or update of facility's ER plan): 01-Jul-2013

### Emergency Response Training

Training Date (Date of most recent review or update of facility's employees): 29-Jul-2012

### Local Agency

Agency Name (Name of local agency with which the facility ER plan or response activities are coordinated): Peoria Fire Department

Agency Phone Number (Phone number of local agency with which the facility ER plan or response activities are coordinated): (623) 773-7279

### Subject to

OSHA Regulations at 29 CFR 1910.38: Yes

OSHA Regulations at 29 CFR 1910.120: Yes

Clean Water Regulations at 40 CFR 112: Yes

RCRA Regulations at CFR 264, 265, and 279.52: Yes

OPA 90 Regulations at 40 CFR 112, 33 CFR 154, 49 CFR 194, or 30 CFR 254: Yes

State EPCRA Rules or Laws: Yes

Other (Specify):



## Executive Summary

¿The Goal is Zero¿ is the primary objective of the City of Peoria¿s Responsible Care Program. It requires our employees to achieve and sustain zero recordable incidents at the Greenway plant. It is a fundamental principle at the City that ALL incidents are preventable and that ¿The Goal is Zero¿ philosophy is truly a responsibility of ALL employees, ALL of the time.

While recognizing the difficulty of achieving a completely risk-free work environment, ¿The Goal is Zero¿ has become an integral part of everything that is done at the plant and has equal priority with production and water quality in the day-to-day operations of the Greenway Water Treatment Plant.

All personnel have the authority and the obligation to shut down any operation and/or stop any work that could result in an unsafe condition. No operation or work will be started unless it can be performed safely. Supervisory personnel have the responsibility of directing work in the safest manner possible.

Each employee has a vested interest in providing for and assisting with the development and implementation of work practices to protect employee health, welfare and the environment. All employees are responsible and accountable for safety performance including the responsibility to work safely at all times. If at any time an employee feels that an operation is unsafe or being performed in an unsafe manner, he or she has the responsibility to stop the job and communicate such to the supervisor.

In addition, all employees are expected to extend the City of Peoria¿s concepts and principles to the surrounding community, distributors, suppliers, contractors and residents.

Operational excellence at the Greenway Plant can be achieved only by demonstrating continuous improvement in environmental, health and safety performance. No job is so important, no task is so urgent that employees cannot take the time to assure that it is done in a safe and environmentally sound manner.